

# 6JH6

## Semiremote-Cutoff Pentode

### 7-PIN MINIATURE TYPE

For Use in Gain-Controlled Picture-IF  
Amplifier Stages of Color TV Receivers

#### GENERAL DATA

##### Electrical:

##### Heater Characteristics and Ratings:

Voltage (AC or DC) . . . . .	6.3 ± 0.6	volts
Current at heater volts = 6.3 . . . . .	0.300	amp
Peak heater-cathode voltage:		
Heater negative with		
respect to cathode. . . . .	200	volts
Heater positive with		
respect to cathode. . . . .	200 <sup>a</sup>	volts

##### Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>b</sup></i>	
Grid No.1 to plate. . . . .	0.025 max.	0.015 max.	pf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater. . . . .	7	7	pf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater . . . . .	2	3	pf

##### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . . .	125	volts
Grid No.3 . . . . .	<i>Connected to cathode at socket</i>	
Grid-No.2 Supply Voltage. . . . .	125	volts
Cathode Resistor. . . . .	56	ohms
Plate Resistance (Approx.) . . . . .	0.26	megohm
Transconductance. . . . .	8000	μmhos
Plate Current . . . . .	14	ma
Grid-No.2 Current . . . . .	3.6	ma
Grid-No.1 Voltage (Approx.)		
for transconductance (μmhos) = 50		
and cathode resistor (ohms) = 0 . . . . .	-19	volts
Transconductance Range for grid-		
No.1 volts = -4.5 and cathode		
resistor of 56 ohms . . . . .	400 - 900	μmhos

##### Mechanical:

Mounting Position . . . . .	Any
Type of Cathode . . . . .	Coated Unipotential
Maximum Overall Length. . . . .	2-1/8"
Maximum Seated Length . . . . .	1-7/8"
Length, Base Seat to Bulb Top	
(Excluding tip) . . . . .	1-1/2" ± 3/32"
Diameter. . . . .	0.650" to 0.750"



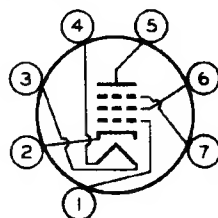
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DATA 1  
4-63

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Dimensional Outline . . . . . See *General Section*  
 Bulb. . . . . T5-1/2  
 Base. . . . . Small-Button Miniature 7-Pin (JEDEC No.E7-1)  
 Basing Designation for BOTTOM VIEW. . . . . 7CM

Pin 1 - Grid No.1  
 Pin 2 - Cathode  
 Pin 3 - Heater  
 Pin 4 - Heater



Pin 5 - Plate  
 Pin 6 - Grid No.2  
 Pin 7 - Grid No.3,  
 Internal  
 Shield

## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE . . . . . 300 max. volts  
 GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE . . . . . 0 max. volts  
 GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . . . . 300 max. volts  
 GRID-No.2 VOLTAGE . . . . . See *Grid-No.2 Input Rating Chart*  
 at front of Receiving Tube Section  
 GRID-No.1 (CONTROL-GRID) VOLTAGE:  
 Positive-bias value . . . . . 0 max. volts  
 GRID-No.2 INPUT:  
 For grid-No.2 voltages  
 up to 150 volts . . . . . 0.55 max. watt  
 For grid-No.2 voltages  
 between 150 and 300 volts . See *Grid-No.2 Input Rating Chart*  
 at front of Receiving Tube Section  
 PLATE DISSIPATION . . . . . 2.3 max. watts

### Maximum Circuit Values:

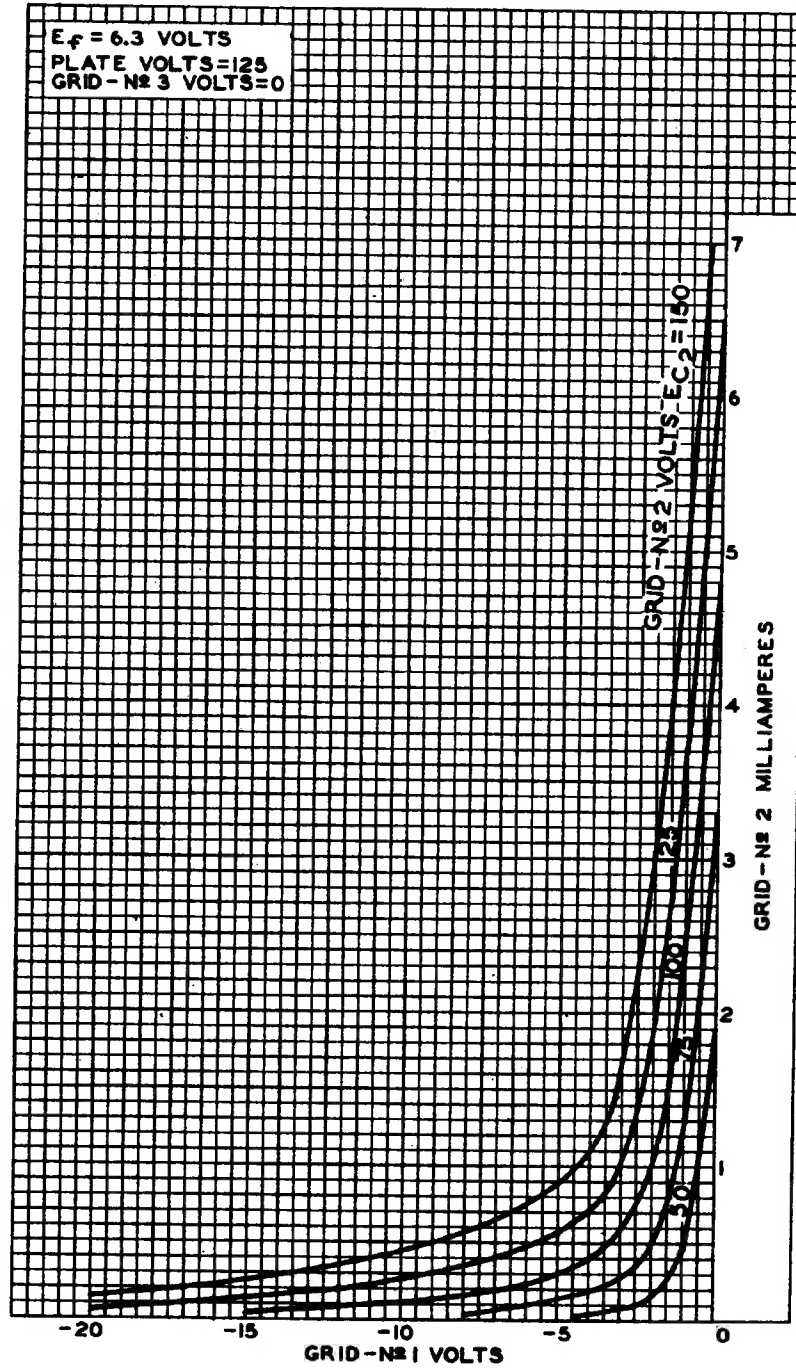
Grid-No.1-Circuit Resistance:  
 For fixed-bias operation. . . . . 0.25 max. megohm  
 For cathode-bias operation. . . . . 1 max. megohm

<sup>a</sup> The dc component must not exceed 100 volts.

<sup>b</sup> With external shield JEDEC No.316 connected to cathode.

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## AVERAGE CHARACTERISTICS



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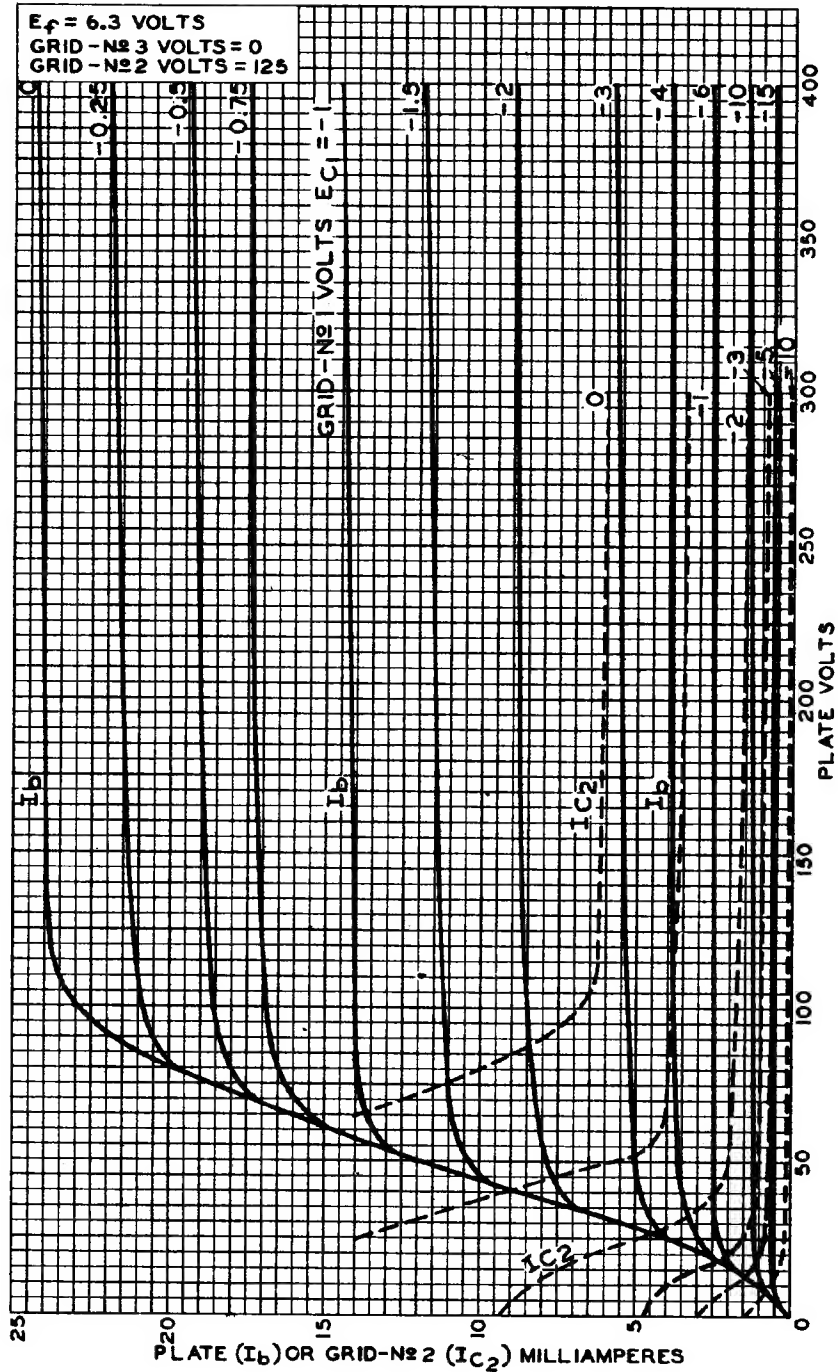


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## AVERAGE CHARACTERISTICS



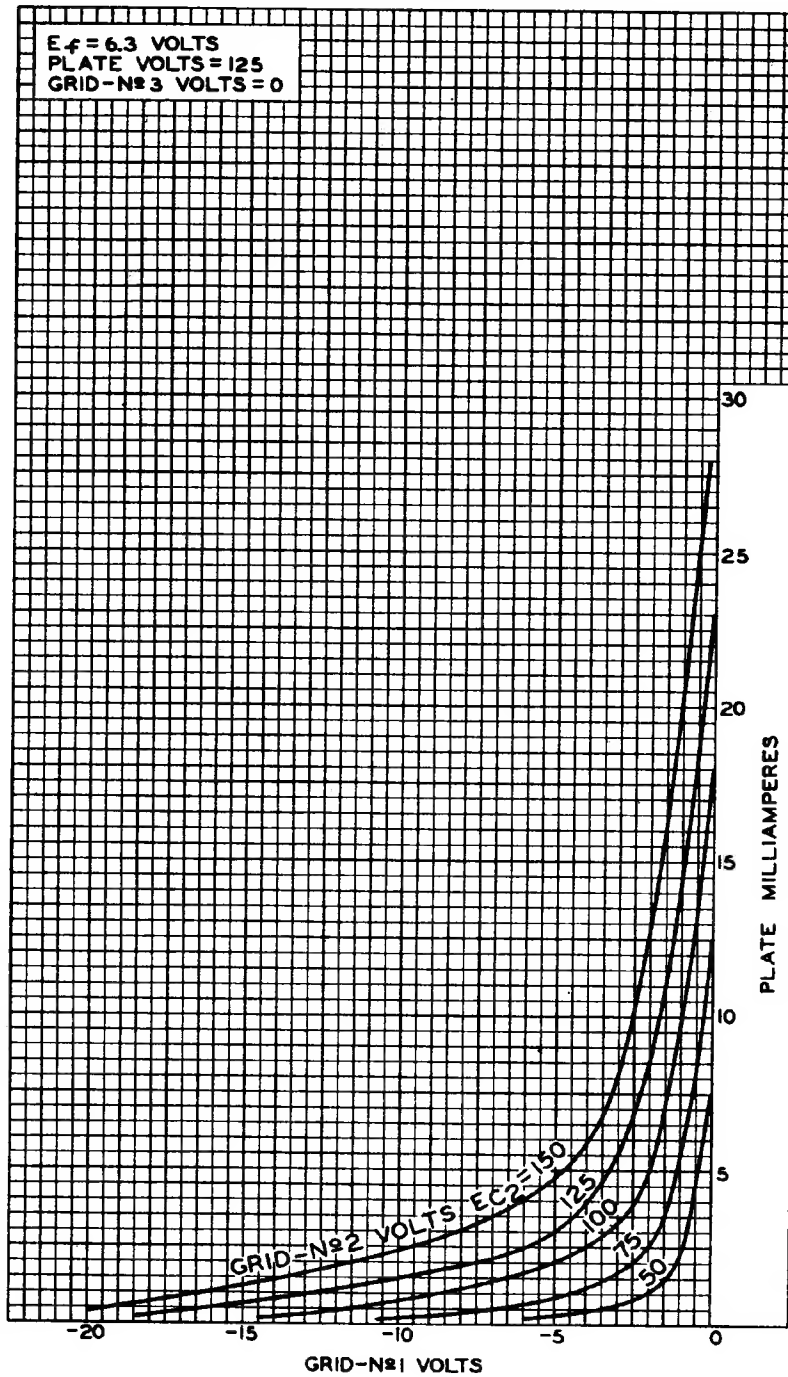
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## AVERAGE CHARACTERISTICS



92CM-948IRI

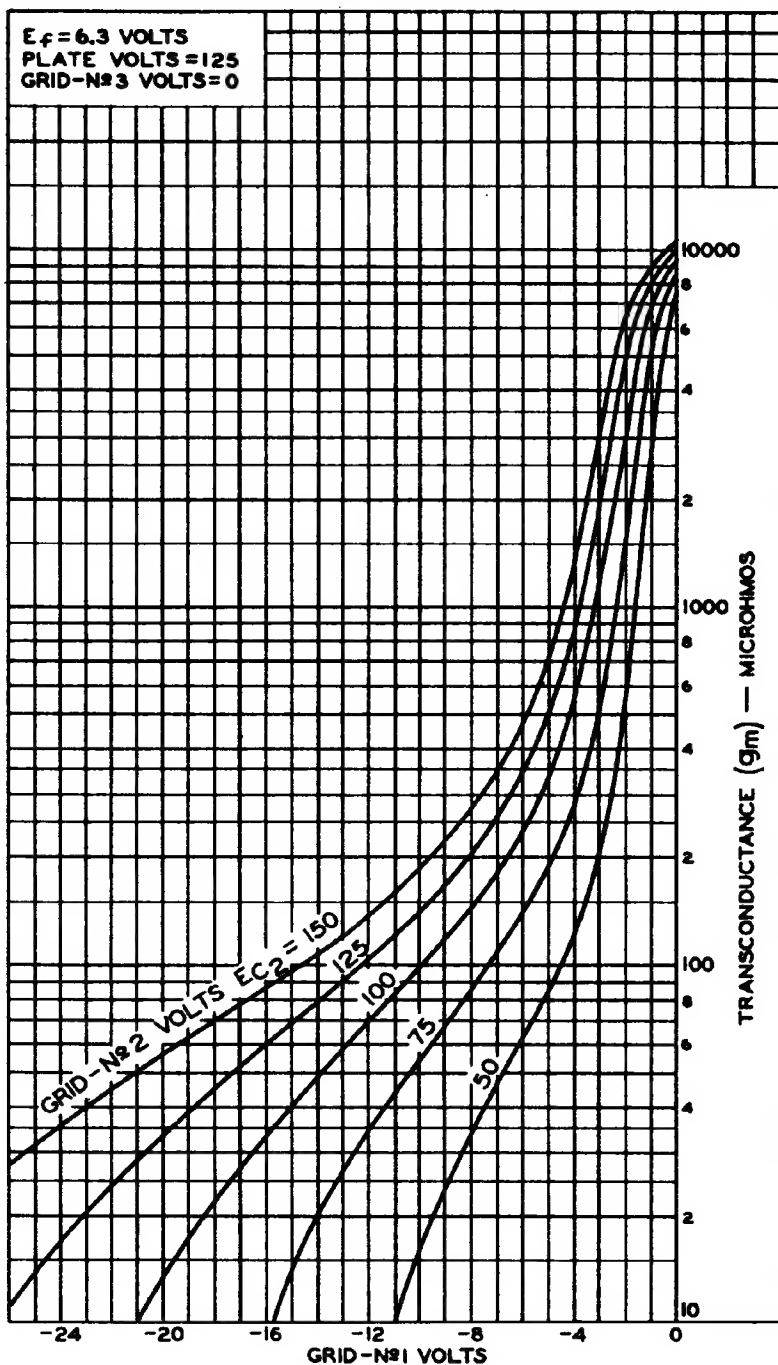


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## AVERAGE CHARACTERISTICS



92CM-8509R1

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